BEVZ, G.P.(Kiyev); DEYNEGA, A.V.(Kiyev); OSIPYAN, I.N.(Krasnodarskiy kray)

"Methods of teaching mathematics." Part 2, by S.E.Liapina and others. Reviewed by G.P.Bevz, A.V.Deinega, I.N.Osipian. Mat. v shkole no. 4:78-85 Jl-Ag '58. (MIRA 11:7)
(Mathematics)
(Liapina, S.E.)

KONTOROVICH, P.G.; KURBATOV, V.A. (Sverdlovsk); GUTMAN, A.Ya. (Moskva); DEYNEGA, A.V. (Kiyev); ISACHKIN, B.Ya. (Penza); METRONINA, N.G. (Tambov); PONOMAREV, V.S. (Izhevsk); SELIVANOV, D.P. (Korsun'-Shevchenkovskiy, Cherkasskaya obl.); KOLIKOV, A.F. (Kalinin); SHOR, Ya.A. (Moskva); IVANOV, M.I. (Tula)

Discussion of the new mathematics curricula. Mat. v shkole no.3: 4-20 My-Je '59. (MIRA 12:9)
(Mathematics)

DEYNEGA, A.V. (Slavyansk)

Some uses of elementary transcendental equations. Mat.v shkole no.4:51-55 Jl-Ag '60. (MIRA 13:9)
(Equations)

DEYNEGA, F.D.; VUL'FSON, M.G.; PYL'NEN'KIY, A.A., redaktor; VUYEK, M.P., tekhnicheskiy redaktor.

[Brewing beer according to new techniques] Proizvodstvo piva po novoi tekhnologicheskoi skheme. Kiev, Gos.izd-vo tekhn. lit-ry USSR, 1954. 61 p. (Microfilm) (MLRA 9:5)
(Beer)

DEYNEGA, F.D. [Deineha, F.D.]

Prospects of the development of the brewing and soft drinks industry in the Ukrainian S.S.R. during the period from 1966 to 1970. Khar. prom. no.2:8-9 Ap-Je '65. (MIRA 18:5)

DEYNEGA, F.D. [Deineha, F.D.]

Intensification of processes in malt production. Khar. prom. no.4:37 O-D '65. (MIRA 18:12)

L 13608-66 EWT(1)/EWA(h)

ACC NR: AP6002877 SOURCE CODE: UR/0286/65/000/024/0037/0037

INVENTOR: Deynega, G. A.

ORG: none

TITLE: Amplitude-phase polarization discriminator. Class 21, No. 176963

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 37

TOPIC TAGS: discriminator, polarization discriminator, amplitude phase discriminator

ABSTRACT: An amplitude-phase polarization discriminator with four detector heads (see Fig. 1) is introduced. To improve its wide-band characteristics and accuracy of

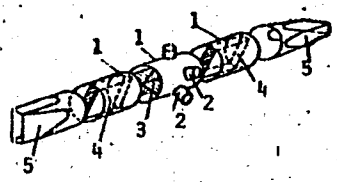

Fig. 1. Polarization amplitude-phase discriminator

1 - Section of the circular waveguide; 2 - detector heads; 3 - attenuator; 4 - dielectric plates; 5 - transition from circular to rectangular waveguides.

measuring attenuations and phase shifts of signal in rf four terminal networks, the detector heads are mounted in a single plane in the cross section of a circular waveguide between dielectric plates. The dielectric plates function as polarization

Card 1/2 UDC: 621.372.852.4

L 13608-66

ACC NR: AP6002877

converters oriented in a single or several mutually perpendicular planes at an angle of 45° with respect to the linearly polarized inputs of the polarizer. Orig. art. has: 1 figure. [JR]

SUB CODE: 09/ SUBM DATE: 29Mar65/ ATD PRESS: 4187

Card 2/2

KIRSHIN, I.K.; DEYNEGA, L.V.

Changes in the leaf growth of grasses under the effect of gibberellin during short and long days. Bot.zhur. 49 no.10:1501-1506 O '64. (MIRA 18:1)

1. Ural'skiy gosudarstvennyy universitet imeni A.M.Gor'kogo, g. Sverdlovsk.

L 20670-66 EWT(m)/EWA(h)
ACC NR: AP6007983 SOURCE CODE: UR/0018/66/000/003/0118/0120

AUTHOR: Deynega, N. (Captain of the guard)

ORG: none

TITLE: A device for estimating nuclear-explosion yield

SOURCE: Voyennyy vestnik, no. 3, 1966, 118-120

TOPIC TAGS: nuclear explosion, detector, nuclear explosion detection, nuclear explosion

ABSTRACT: To predict radiation conditions and estimate military losses resulting from a nuclear strike, it is necessary to know the yield of a nuclear explosion. This can be computed from the time lapse of light radiation and the height of the cloud produced by the explosion. A special device has been designed for his purpose. It automatically signals (with light or buzzer) the occurrence of a nuclear explosion, determines the yield of detonated nuclear explosives, responds to light impulses from both ground and atmospheric detonations, and ensures the safety of the operator. The device consists of a radiation detector, a control panel with a recorder, and a shielded connecting cord. The basis of the electrical circuit are six photoelectronic multipliers, a d-c amplifier, power sources, and relays (see Fig. 1). Since the device may be activated by direct sunlight, daytime shielding is required. Orig. art. has: 2 figures. [SA]

SUB CODE: 15, 18 SUBM DATE: none/ ATD PRESS: 4223

Card 1/2

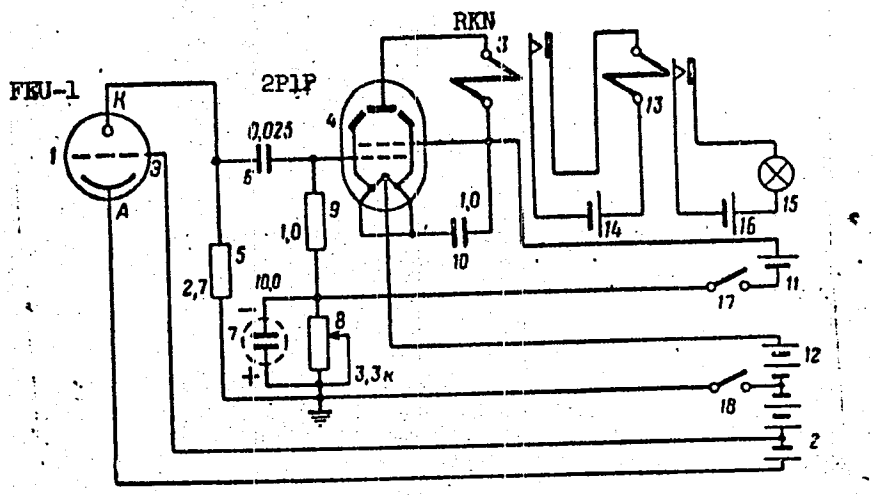

Fig. 1. Circuit diagram of nuclear-explosion-energy meter

1 - Six FEU-1 photoelectronic multipliers; 2 - three 100 PMTsG-U-0.05 batteries; 3 - RKN relay; 4 - 2P1P beam tetrode; 5 - input impedance; 6 and 10 - capacitors; 7 - electrolytic capacitor; 8 - variable resistor; 9 - resistor; 11 and 14 - 87 PMTsG-0.05 batteries; 12 - 1.6 PMTs-8 cells; 13 - signal light relay; 15 - signal light; 16 - KBS-L-0.5 battery; 17 and 18 - switches.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410320001-0"

SOV/49-59-2-4/25

AUTHORS: Melamud, A. Ya., Khudzinskiy, L. L., Deynega, S. A.

TITLE: Station of Intermediate Magnetic Recording of Seismic Waves (Stantsiya promezhutochnoy magnitnoy zapisi seysmicheskikh kolebaniy)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1959, Nr 2, pp 197-209 and 4 plates (USSR)

ABSTRACT: A detailed project of a station for the intermediate recording of seismic waves on a magnetic wave recorder is described. The main divisions of such a station are: 1) 9-channel magnetic recorders and reproducers, 2) the apparatus for filtering, 3) the points of frequency analysis of seismic waves, 4) the general control and the power pack (accumulators, dry batteries and a generator of total power 300 W). Fig 1 represents a general layout of the station where I - tape recorder, II - device for printing and recording the time, III - oscillograph for frequency analysis points, A - seismographs, ... D - amplifiers of the seismic (bottom) and magnetic (top) recordings; V - amplifiers of reproducers. The detailed plan of the station

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Station of Intermediate Magnetic Recording of Seismic Waves

is shown in Fig 2, where A - seismograph, U - amplifier of magnetic recording (Fig 3 shows its frequency and voltage), V - multi-channel type recorder, G - reproduction amplifier, D - seismic amplifier, Ye. - seismic oscillograph, Yu and Z - circuits for indexing and printing the seismograms. The characteristic frequencies of the station are shown in Fig 4a and Fig 4b (A - low frequency filtration, B - high frequency filtration). The numbers 1, 2, 3 denote the frequency characteristics of the: 1 - register: reproduction track, 2 - seismic amplification, III - intermediate magnetic recording. The experimental station was employed in 1957 by the expedition of the Institute of Physics of the Earth, Academy of Sciences USSR, in their investigations on the nature and dynamical properties of the multiple reflected waves. The fidelity of the magnetic recordings was excellent, which can be seen in Fig 5, showing the 9 tracks: a - seismogram - reproduction, and b - magnetic recording. The effect of the channels on each other was negligible (Fig.6). The identity of the recordings is further shown in Fig 7, where 2 pairs (a and b) of the original seismograms and the reproductions from the tape recorder are shown. Figs 8 and 9 give some examples of the results obtained by means of the

Station of Intermediate Magnetic Recording of Seismic Waves

magnetic recordings. The station was able to register the seismic waves from 20 to 500 h, i.e. it could be employed in the low, medium and high frequency seismic prospecting. The apparatus described does not introduce any distortion, therefore it can be used for the determination of the dynamical characteristics of seismic waves. There are 9 figures and 35 references; 17 of the references are Soviet, 15 are English, 2 Italian.

ASSOCIATION: Akademiya nauk SSSR, Institut fiziki Zemli (Academy of Sciences USSR, Institute of Physics of the Earth)

SUBMITTED: February 5, 1958.

MELAMUD, A.Ya.; DEYNEGA, S.A.

Dynamic range, noise level, detonation of magnetic recorder, and nonlinear distortions on the APMZ-CHM apparatus. Razved. geofiz. no.3:3-13 '65. (MIRA 18:8)

DEYNEGA, V.G.

Effect of immunization with crushed muscle extract on the course of experimental syndrome of the soft tissue crush. Pat. fiziol. i eksp. terap. no.2:22-25 '64. (MIRA 17:9)

1. Otdel ozhivleniya i meditsinskoy pomoshchi (nachal'nik-kand. med. nauk R.Ya.Gershtenkern) TSentral'noy nauchno-issledovatel'skoy laboratorii po gornospasatel'nomu delu, Donetsk.

DEYNEGA, V.G.

Changes in the blood system in the early stages of experimental prolonged crush syndrome. Probl. gemat. i perel. krovi no.2:56-58 '65. (MIRA 18:11)

1. Otdel ozhivleniya i okazaniya ekstrennoy meditsinskoy pomoshchi (nachal'nik - R.Ya.Gershtenkern) TSentral'noy nauchno-issledovatel'skoy laboratorii (nachal'nik K.Yu.Kaminskiy), Donetsk.

DEYNEGA, V.G.

Treatment of the syndrome of prolonged crushing of the soft tissue with transfusion of immune blood. Eksper. khir. i anest. 9 no.5:64-67 S-O '64. (MIRA 18:11)

1. Meditsinskiy otdel (nachal'nik - kand. med. nauk R.Ya. Gershtenkern) TSentral'noy nauchno-issledovatel'skoy laboratorii po gornospasatel'nomy delu (nachal'nik - V.P. Rudchenko) i kafedra obshchey khirurgii (zav. - prof. A.M. Ganichkin) Donetskogo meditsinskogo instituta.

DEYNEGA, Yu.F.; DUMANSKIY, A.V.; VINOGRADOV, G.V.

Electrization and rheological properties of nonaqueous plastic disperse systems. Koll. zhur. 23 no.1:25-30 Ja-F '61. (MIRA 17:2)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR, Kiyev.

DEYNEGO, Yu. B., (Engr)

Dissertation: "Investigation of Large Tractor-Towed Scrapers." Cand Tech Sci, Moscow Automobile Highway Inst imeni V. M. Molotov, 27 May 54. Vechernyaya Moskva, Moscow, 18 May 54.

SO: SUM 284, 26 Nov 1954

BORODACHEV, I.P., kandidat tekhnicheskikh nauk.; DEYNEGA, Yu.B., inzhener.

The D-162 bulldozer mounted on the S-80 tractor. Mekh.stroi. 4 no.9: 17-18 S '47. (MLRA 9:2)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut Stroydormash.
(Bulldozers)

DEYNEGO, Yu.B., kand.tekhn.nauk

More new machinery for builders. Stroi. i dor. mash. 7 no.3: 1-9 Mr '62. (MIRA 15:4)
(Construction equipment) (Road machinery)

DEYNEGA, YU. F.

Dissertation: "Investigation of the Effect of Interaction and Orientation of Particles on the Dielectric Properties of Disperse Systems." Cand Chem Sci, Inst of General and Inorganic Chemistry, Acad Sci Ukr SSR, Kiev, 1953. (Referativnyy Zhurnal--Khimiya, Moscow, No 6, Mar 54)

SO: SUM 243, 19 Oct 54

DEYNEGA, Yu.F.; DUMANSKIY, A.V.; KURILENKO, O.D.

Dielectric properties of the vanadium-pentoxide sol in a flow. Koll.zhur. 15 no.4:234-237 '53. (MLRA 6:8)

1. Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR (Kiyev).
(Dielectrics) (Vanadium pentoxide)

DEYNEGA, Yu. F.

(4)

Chem Abs v48
1-25-54
general + Physical Chemistry

The dielectric properties of streaming emulsions of the oil-in-water type. Yu. F. Deinega, A. V. Dumanskii, and O. D. Kurilenko (Inst. Gen. and Inorg. Chem., Acad. Sci. Ukr. S.S.R., Kiev). *Kolloid Zhur.* 15, 361–4(1953).—The dielec. const. ϵ of an emulsion of 0.5*N* NaOH in purified transformer oil, stabilized with Mg oleate, was independent of the time that the emulsion spent in the condenser before measurement and of whether the emulsion was or was not sheared between 2 coaxial cylinders. The ϵ of a nonstabilized emulsion increased in time if the internal cylinder almost reached to the bottom of the external cylinder (app. *A*), and decreased in time if there was ample space under the bottom of the internal cylinder. This emulsion deposited a conducting layer; ϵ was great when this layer remained between the cylinders and small when the settling lowered the concn. c of the emulsion between these, and the sediment was not measured. The ϵ was a linear function of c. Shearing of nonstabilized emulsions in *A* lowered ϵ, because it disturbed the bottom layer. This explains Voet's results (*C.A.* 42, 17c). J. J. Bikerman

6-15-54 RPP

DEYNEGA, Yu. F.

Dielectric properties of solutions and gels of agar. A. V. Dumanskii, O. D. Kurilenko, and Yu. F. Deinega. *Kolloid. Zhur.* 17, 180-3(1955); cf. preceding abstr.—The dielec. const. ϵ of 1% agar soln. at 45° is 64.2 and 116 for wave lengths λ of 27 and 185 m., resp., and ϵ of 1% agar gel is at 20° 71.8, 80.7, and 102, and at 45° 64.3, 80.0, and 110 for λ of 27, 47, and 135 m., resp. Thus, gelation affects ϵ at large λ only. Temp. coeff. of ϵ varies its sign when λ changes; this explains the discrepancies in the literature (cf. Shul'man, *C.A.* 35, 7790⁴). Also in *Colloid J. U.S.S.R.* 17, 167-9(1955)(Engl. translation). J. J. Bikerman

DEYNEGA, Yu. F

20-3-24/46

AUTHORS: Dumanskiy, A. V. , Corresponding Member of the AN USSR, Deynega, Yu. F.

TITLE: A Dielectric Investigation of Phase Transformation in the Soap--Hydrocarbon-Water System (Dielektricheskoye issledovaniye fazovykh prevrashcheniy v sisteme mylo-uglevodorod-voda)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 115, Nr 3, pp. 436 - 438 (USSR)

ABSTRACT: The investigation of the relation between the phase transformation in soap and a system thickened by soap is of great interest. For experiments of such kind thermal, radiographic, optic and other methods are used. The authors investigated the phase transformation in the soap-hydrocarbon system by method of measurement of the dielectric constant. As experimental object served, in this case, a system consisting of xylene and calcium oleate the phase transformations of which occur at low temperatures. The capacity has been measured in an interval of 1 to 10 kilocycles by means of a sound bridge and in an interval of 50 kilocycles to 1,5 megacycles by means of a Q-meter. The results of the measurement of the temperature-dependence of the dielectric constant of a system consisting of 80 g calcium oleate and 100 ml are illustrated in a dia-

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A Dielectric Investigation of Phase Transformation in the Soap-Hydrocarbon-Water System

gram. Two other diagrams illustrate the influence of the water--addition. In all examined systems the dieelectric constant decreases in accordance with the increasing frequency. This effect is particularly noticeable in aqueous systems. The hereby obtained results show signs of the occurrence of a Maxwell-Wagner (Maksvell--Vagner) - polarization surface. At rising temperature the dielectric constant of a waterfree system decreases as consequence of weakening of the intermolecular interaction and the more at low frequencies. Also water has a strong influence upon the dielectric properties of the system. The decrease of the dielectric constant results obviously from the intensification of the interaction of the polar molecular groups of the soap at the phase transformations The binding of the water with soap reduces the temperature of the phase transitions. But the free water does not influence the temperature of the phase transitions. The curves recorded during heating and cooling differ considerably as a result of the undercooling of the system. The dielectric properties were also effected by the recrystallization of the system. Consequently the investigation of the dielectric constant yields precious hints on the phase transformation in the soap-hydrocarbon-water system. There are 3 figures, and 6 references, 4 of which are Slavic.

20-3-24/46

A Dielectric Investigation of Phase Transformation in the Soap-Hydrocarbon-Water System

ASSOCIATION: Institute for General and Anorganic Chemistry of the AN Ukrainian SSR (Institut obshchey i neorganichskoy khimii Akademii nauk USSR)

SUBMITTED: April 8, 1957

AVAILABLE: Library of Congress

Card 3/3

.5(3) SOV/69-21-2-8/22

- AUTHORS: Deynega, Yu.F., Dumanskiy, A.V., Lobastova, A.V.

TITLE: The Dielectric Investigation of the Formation Process of Soap-Hydrocarbon Solutions (Dielektricheskoye issledovaniye protsessa obrazovaniya rastvorov mylo-uglevodorod)

PERIODICAL: Kolloidnyy zhurnal, 1959, Nr 2, pp 170-173 (USSR)

ABSTRACT: This article concerns an investigation of micelle formation in hydrocarbon solutions of soap, carried out by measuring the dielectric constant. The systems used for this purpose were sodium phenylstearate-o-xylene and sodium phenyl stearate - o-xylene - oleic acid. The measurings were carried out at temperatures from 20-130°C, and within a frequency range from 400 to 10,000 hertz. The experiments have shown that in both systems, at a fixed temperature and concentration, the dielectric constant passes through a maximum, which represents higher values at higher temperatures in the second system in dependence on the doses of added oleic acid. The fact as a whole points to the connection between changes in lyophilic disperse systems

Card 1/2

The Dielectric Investigation of the Formation Process of Soap-Hydrocarbon Solutions

and critical phenomena. Within the critical area the system, when cooled, transforms into a two-phase colloid system, but when heated, into a single-phase system. At a considerable increase in the doses of oleic acid (from 3 milliliters) no changes take place in the system, apparently due to the formation of a true solution within the above-indicated temperature interval. There are 2 graphs, 1 diagram and 10 references, 8 of which are Soviet and 2 English.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN UkrSSR, Kiyev (Institute of General and Inorganic Chemistry of the AS UkrSSR, Kiyev)

SUBMITTED: July 16, 1958

DEYNEGA, Yu.F.; DUMANSKIY, A.V.; VINOGRADOV, G.V.; PAVLOV, V.P.

Dielecectric and rheological properties of disperse plastic systems.
Koll.zhur. 22 no.1:16-22 Ja-F '60. (MIRA 13:6)

1. Institut obshchey i neorganicheskoy khimii AN USSR, Kiyev.
(Oils and fats)

DEYNEGA, Yu.F. [Deineha, IU.F.]

Dielectric and rheological investigation of plastic pseudogels of soaps. Dop.AN URSR no.1:60-63 '60. (MIRA 13:6)

1. Institut obshchey i neorganicheskoy khimii AN USSR. Predstavleno akademikom AN USSR A.V.Dumanskim [A.V.Dumans'kym].
(Soaps—Electric properties)

DEYNEGA, Yu.F.; PAVLOV, V.P.; VINOGRADOV, G.V.

Instrument for a simultaneous study of dielectric and rheological properties of viscoplastic materials. Zav.lab. 26 no.3:353-356 '60. (MIRA 13:6)

1. Institut obshchey i neorganicheskoy khimii Akademii nauk USSR.
(Materials--Electric properties)
(Rheology)

27058

S/021/60/000/005/014/015
D210/D304

15.6600
11.9100

AUTHOR: Deynega, Yu. F.

TITLE: Dielectric and rheological investigations of the anisotropic structure of a Na-lubricant

PERIODICAL: Akademiya nauk ukrayins'koyi RSR. Dopovidi, no. 5, 1960, 655-658

TEXT: In this study the subject of investigation was a plastic lubricant obtained by thickening a mineral oil with sodium soaps of castor oil acids, named consteline. The author studied the process of disorientation and reorientation of the dispersed phase particles of this lubricant under transition conditions from elastic deformation through the strength limit to a steady viscous flow, by measuring the changes in its dielectric constant ε. The flow measurements were carried out by means of a specially built rotation plastoviscosimeter PVR-1, in which the external and internal cylinders served as condenser plates. The capacity measurements (for evaluating dielectric constant

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Dielectric and rheological...

ε) were performed at a frequency of 400 cycles, by the heat method. [Abstractor's note: No other details of measurements given]. The values of the strength ($\tau_{s.l.}$) and stress (τ) limits, which correspond to a steady viscous flow in all experiments differ in the range ± 3% and the values of ε were determined with an accuracy of ± 0.3%. The rigid oriented structures were obtained by two means: the first consisted in quickly turning by hand the viscosimeter body through 180° and immediately stopping it; the second by stopping suddenly a rotor, revolving with a constant velocity. By the first method an anisotropic solidified structure was obtained; then the rotor was rotated at a rate of 0.96 rev./min. in the direction of particle orientation. A dynamometer with a modulus 30 g cm^2 /rad. was used in these tests, [Abstractor's note: No other details given]. Similar experiments were carried out with the rotor revolving in the opposite direction to the structure-orientation. The author investigated also the effect of thixotropy on the value τ (t). The constaline disoriented structure was recriented by the rotor motion at 0.96 rev/min. and τ(t) was

Dielectric and rheological ...

measured immediately afterwards; the results obtained are given in Fig. 2, curve 1. Measurements were repeated after 72 hours of the thixotropic structure renovation, [Abstractor's note: Method not given] and are shown in Fig. 2 and curve 2; when the rotor motion acted in the opposite direction, (as described in the first experiment), the results of $\tau(t)$ measurement are given on curve 3 of Fig. 2; it is seen that the $\tau(t)$ values are markedly increased. By analyzing the results obtained, the author concluded that the plastic properties of constaline depend on the presence of two kinds of dispersed particles: Large ones which cause the system to have a rigid oriented structure, scarcely affected by thermal motion; and small ones which react to that motion, and which are responsible also for the renovation of the thixotropic structure and cause particle desorientation in anisotropic structures when the stress limit is reached. There are 2 figures and 5 Soviet-bloc references.

ASSOCIATION: Institutu zacal'noy i neorganichnoy khimii AN YRSR (Institute of General and Anorganic Chemistry of Academy of Science, UkrSSR)

Card 3/4

84842

S/021/60/000/006/014/019
A153/A029

24.2130 1138, 1482, 2209

AUTHORS: Deyneha, Yu.F.; Dumans'kyy, A.V., Academician, AS UkrSSR

TITLE: The Investigation of Electrizations in the Course of Deformation of Plastic Lubricants

PERIODICAL: Dopovidi Akademiyi nauk Ukrayins'koyi RSR, 1960, Nr. 6, pp. 798 - 800

TEXT: The results of a study of the effects of various conditions of the flow of plastic lubricants upon electrization are given, obtained on the basis of a study of the dependence of the electrization potential (V) on the rate of deformation (D), conducted on a rotary plastics-viscosimeter described by Yu.F. Deyneha, V.P. Pavlov and H.V. Vinogradov (Ref. 3). Subject of the study were a 20.6% non-sodium lubricant (konstalin), a 17.5% non-calcium lubricant (solidol) and a 10% non-lithium lubricant (tsiatim 201). The potential was investigated on a special stand, incorporating a GV-1 d-c amplifier (input voltage 10^{11} ohm) and a KO-2 (KO-2) electron-beam oscillograph. The accuracy of the voltage measurement at a 0 - 0.5 v interval was ± 6 mv, at an interval 0.5 - 1 v ± 15 mv. The stand was charged with lubricants as the rotor rotated at a speed of 0.96 rpm.

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S/021/60/000/006/014/019
A153/A029

The Investigation of Electrizations in the Course of Deformation of Plastic Lubricants

The clearance between the inner and outer cylinders was 0.25 mm. It was found that in the region of low rates of deformation a positive potential appeared and on passing to high rates of deformation a negative one. Inversion of the electrization effect is explained by the change in the nature of the flow in the layer on the wall and in the volume of the deformed system. An important role in the electrization of dispersed systems is also played by the degree of homogenization. There are: 1 figure and 5 Soviet references.

ASSOCIATION: Instytut zagal'noyi i neorhanichnoyi khimiyi AN UkrSSR (Institute of General and Inorganic Chemistry of the AS UkrSSR)

SUBMITTED: February 4, 1960

Card 2/2

28685
S/021/60/000/007/009/009
D211/D305

11.9000

AUTHORS: Deynega, Yu.F., and Dumans'kyy, A.V. Academician AS UkrSSR

TITLE: Investigating the electrization and flow properties of a Na-lubricant (constaline)

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 7, 1960, 926 - 928

TEXT: This is a continuation of previous studies of constaline, in which it was found that, as a result of fluidity in its marginal area, electrization of the lubricant arises. This investigation comprised a comprehensive study of the kinetics of shearing stress (τ) and electrization potential (v) changes in constaline, under transition conditions from elastic deformation through the stress limit to a steady flow. Investigations were carried out with a heterogeneous structure constaline in a rotation plastoviscosimeter - a condenser with a 0.25 mm distance, between electrodes. The potential between the inner and outer cylinders serving as electrodes

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Investigating the electrization ...

was determined by means of a circuit consisting of a d.c. voltage amplifier, gv = 1 with an input resistance of 10^{11} ohms; and a electronic oscillograph. Stabilized oriented flow structures were obtained in two ways, either by suddenly stopping the rotor revolving at a constant rate, or by quickly turning the rotor by hand through approximately 180° and suddenly stopping it; by this second method a stabilized oriented structure could be attained which was practically heterogeneous. When such an anisotropic stable structure was obtained the inner cylinder - the viscosimeter's rotor - was put in motion at the rate of 0.96 rev/min and the kinetics of the increasing shearing stress τ and the electrization potential v were simultaneously registered; for these measurements a dynamometer, with a modulus of 30 ccm/rad. was used. The results obtained are given in graphic form in which 3 sets of curves are drawn: The first concerns the anisotropic structure of constaline orientated by a rotor motion of 0.96 rev/min; the second is for a highly oriented structure, obtained by the second method in the direction of rotor motion; and the third - in the direction opposite to that of rotor motion. As has been previously shown, the particles are nega-

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Investigating the electrization ...

tively charged, so their contact with the rotor causes a slow rise in the positive potential, the reorientation of structural elements affecting the potential change kinetics especially during the plastic deformation process. The increase in the stress limit in highly oriented structures is connected with disorientation and reorientation of the dispersed phase particles with corresponding changes in the structure of the marginal area. Thus, the nature of electrization potential changes in the transition process from elastic deformation through the stress limit to a steady flow essentially depends on the previous orientation of the lubricant structure. There are 1 figure and 4 Soviet-bloc references.

ASSOCIATION: Institut zagal'noyi i neorganichnoyi khimii AN URSR (Institute of General and Inorganic Chemistry, AS UkrSSR)

SUBMITTED: February 11, 1960

Card 3/3

DEYNEGA, Yu. F. [Deineha, IU.F.]; VOVENKO, A.M. [Vovnenko, O.M.]

Investigation of elektrokinetic phenomena in plastic hydrocarbon systems. Dop.AN URSR no.6:769-771 '61. (MIRA 14:6)

1. Institut obshchey i neorganicheskoy khimii AN USSR. Predstavleno akademikom AN USSR A. V. Dumanskim.
(Hydrocarbons--Electric properties)

DEYNEGA, Yu.F. [Deineha, IU.F.]; VOVNENKO, A.M.

Syneresis of plastic lubricants in strong electric fields. Dop. AN URSR no.8:1052-1054 '61. (MIRA 14:9)

1. Institut obshchey i neorganicheskoy khimii AN USSR. Predstavleno akademikom AN USSR A.V. Dumanskim [Dumans'kyi, A.V.].
(Lubrication and lubricants)
(Electric fields)

DEYNEGA, Yu.F. [Deineha, IU.F.]; LOBASTOVA, A.V.

Dielectric polarization of plastic lubricants. Dop. AN URSR no.1:73-75 '62. (MIRA 15:2)

1. Institut obshchey i neorganicheskoy khimii AN USSR. Predstavleno akademikom AN USSR A.V.Dumanskim [Dumans'kyi, A.V.].
(Lubrication and lubricants)
(Polarization(Electricity)

37123

15.6500

S/021/62/000/003/010/010
D202/D302

AUTHOR: Deynega, Yu.F.

TITLE: Investigating the rheological properties of a sodium lubricant in strong electric fields

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 3, 1962, 397 - 400

TEXT: A continuation of previous investigations of a sodium lubricant 'constalin', consisting of hydrocarbons dispersed in a hydrophilic soap medium. The experiments were carried out in a rotating plastoviscometer-condenser, the shearing stress of the lubricant being determined with and without application of electric fields. It has been found that strong electric fields have a considerable effect on rheological properties of the lubricant, markedly lowering its shearing stress; in the author's opinion, this is due to changes in its structure, for under the action of an electric field the dispersing medium migrates to the oppositely charged viscometer-surface. Experimental details and the obtained results are given. There are 2 figures.

Card 1/2

Investigating the rheological ...

ASSOCIATION: Institut zagal'noy i neorganichnoy khimiy AN USSR (Institute of General and Inorganic Chemistry of the AS UkrSSR)

PRESENTED: by A.V. Dumans'kyy, Academician of the AS UkrSSR

SUBMITTED: June 21, 1961

Card 2/2

S/069/62/024/006/002/009
B101/B180

AUTHORS: Deynega, Yu. F., Vinogradov, G. V., Lobastova, A. V.

TITLE: Temperature and frequency dependences of the dielectric parameters of non-aqueous plastic disperse systems

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 6, 1962, 659-666

TEXT: The ε and $\tan\delta$ were measured on sodium castorate ("Konstalin"), calcium soap ("Solidol"), and lithium stearate (201 greases) at various temperatures and frequencies f. Fixed oriented structures were obtained by suddenly stopping the viscosimeter rotor. In the case of "Konstalin", ε and $\tan\delta$ were independent of f below 50 kc/sec, but ε falls when $f > 50$ kc/sec and also as the deformation rate rises. $\tan\delta$ reaches a maximum at $\log f \sim 6$. The effect of f on $\tan\delta$ diminishes and ε drops, with increasing particle orientation. Rising temperature shifts ε_{min} and $\tan\delta_{max}$ to higher frequencies. ε rises between 20 to 80°C and drops a little at 98°C. The temperature coefficient of $\tan\delta$ is positive at low and negative at high frequencies. The frequency dependence of ε is not strong for

Temperature and frequency dependences ...

"Solidol", and increases only by 10% when temperature is raised from 20 to 60°C. For grease 201, ε was independent of frequency between 20 and 80°C. The dielectric constant of "Solidol" fell with increasing particle orientation, but there was no orientation effect with grease 201. Conclusions: The effect of orientation on the dielectric properties can be studied with solidified oriented structures of a disperse phase containing anisodiametric particles. In the case of non-aqueous systems containing a hydrophilic disperse phase, ε and tanδ are strongly dependent on f in the radiofrequency range. This is attributed to electrical polarization due to interfacial ion transfer, i. e., along the particle surfaces of the disperse phase. The relaxation time, which was found to be of the order of 10^{-7} sec, is the most important quantitative characteristic of surface polarization. Non-aqueous systems in which electrokinetic effects are produced by an interfacial double layer, display surface polarization and varying dielectric characteristics. The intensity of surface polarization and its effect on ε and tanδ are dependent on the orientation of particles in the disperse phase. Polarization diminishes as the angle between the

preferred direction of the principal axes of the disperse particles and that of the electric field increases. Within the low-frequency range tanδ increases with rising temperature as a result of higher bulk conductivity. There are 4 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN USSR, Kiyev (Institute of General and Inorganic Chemistry of the AS UkrSSR, Kiyev)

SUBMITTED: September 28, 1962

Card 3/3

S/069/62/024/006/003/009
B101/B180

AUTHORS: Deynega, Yu. F., Vinogradov, G. V.

TITLE: Effect of an electric field on the rheological properties of non-aqueous plastic disperse systems

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 6, 1962, 667-673

TEXT: Mineral oil thickened with 20.6% sodium castorate was subjected to a voltage of ±100 v in a rotary viscosimeter in which its stationary outer cylinder and rotating inner cylinder acted as capacitor plates. Shear stress τ was measured and plotted versus time t. τ dropped sharply when voltage was applied, due to electrokinetic effects. Under the influence of the electric field a wall layer enriched with the dispersion medium is formed on outer cylinder. Serrated τ-versus-t curves were obtained by alternating the potential of the rotor during deformation. This was due to the passage of the dispersion medium through the lubricant, leading gradually to uniformity, when τ approached a steady value after several cycles. Conclusions: In plastic lubricants there are double electric layers at the interface between the hydrophilic disperse phase and the

Card 1/2

non-polar dispersion medium. The phase transport caused by the electric field entails reversible or irreversible structural changes, depending on conditions. Phase transport in an electric field can be used to change the concentration of the disperse phase on solid surfaces and to adjust the wall slip. Simultaneous deformation and phase transport may give rise to the repeated structuralization and destructuralization of the plastic system. There are 3 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN USSR, Kiyev (Institute of General and Inorganic Chemistry of the AS UkrSSR, Kiyev)

SUBMITTED: September 28, 1961

26.2190

36617

S/020/62/143/004/021/027
B101/B138

AUTHORS: Deynega, Yu. F., and Vinogradov, G. V.

TITLE: Effect of strong electric fields on the structure of non-aqueous plastic disperse systems

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 4, 1962, 898-901

TEXT: Because electrokinetic effects have been observed with non-aqueous pseudogels of soaps, it is thought that double electric layers and diffuse layers may exist on the interfaces of such systems. This structure sensitivity to the effect of electric fields was examined by a polarization-optical method. Some "Solidol" (mineral oil thickened with calcium soap) was put between two glass plates, on the outer surfaces of which aluminum foils were attached as electrodes. The electrode spacing was 0.6 mm, and a d.c. field with a gradient of 15 kv/cm was applied. An oriented structure was created by spreading the lubricant perpendicular to the electric field. It was found that (1) the dispersion medium (mineral oil) migrates toward the cathode; (2) the dispersion medium exhibits no birefringence; (3) the structural framework is pressed against the anode causing, besides cata-

Card 1/3

Effect of strong electric fields...

phoresis, strong interaction between the anode and negatively charged particles; (4) the opposite occurs with pole reversal, which can be repeated any number of times; (5) if the direction of the hardened structure coincides with that of the electric field, the migration effects are less intense. Konstalin (spindle oil, thickened with 20.6% sodium castorate) was used to study the successive destruction and thixotropic restoration of the structure under an electric field in the plastoviscometer, rotor and body of which were the electrodes; potential difference was 100 v, and speed was 96 rpm. When a negative potential was applied to the rotor, the readily deforming mineral oil collected around it, and the shear stress dropped to some fractions of the initial value. Here as well, the effect could be repeated by pole reversal. When the potential was switched off, shear stress returned rapidly to its initial value. Thus, by varying the resistance of a system to deformation, it is possible to increase or reduce its surface slip. There are 2 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii Akademii nauk USSR (Institute of General and Inorganic Chemistry of the Academy of Sciences UkrSSR)

PRESENTED: September 23, 1961, by V. A. Kargin, Academician

SUBMITTED: September 19, 1961

Card 3/3

41601
S/021/62/000/009/008/008
D234/D308

11.9400

AUTHORS: Deyneka, Yu.F., and Lobastova, A.V.

TITLE: Investigation of the effect of temperature on dielectric properties of plastic lubricants

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 9, 1962, 1212 - 1215

TEXT: The measurements were carried out in a rotational viscometer. The temperature was maintained with an accuracy of 0.1°C. The investigation concerned constalin, solidol and ЦIAT1M -201 (TsIAT1M-201) which are obtained by thickening light petroleum oils by Na soaps of castor oil acids, by hydrated Ca soaps of cotton oil and by technical lithium stearate respectively. Graphs of the dependence of ε and tan δ on frequency and temperature are given for the sodium lubricant. With increasing temperature the region of sharp decrease of ε is displaced towards higher frequencies, which is explained by loss of orientation of small particles of the soap due to thermal motion. The maximum of the tan δ curves is displaced in the same direction, and its height increases. The relaxation times of surface

Card 1/2

Investigation of the effect ...

polarization at 0° and 20°C calculated with the aid of these graphs are 1 x 10^{-7} and 3 x 10^{-7} sec. The change of thermodynamic functions due to surface polarization (calculated with the aid of the theory of absolute reaction rates adapted to the dielectric relaxation) is ΔF = 7.8 kcal, ΔS = 1.5 cal/degree and ΔH = 8.2 kcal (where H is the heat capacity), per mole. It is stated that the increase of ε of the other two lubricants with temperature is less pronounced and their tan δ increases considerably at low frequencies. There are 2 figures.

ASSOCIATION: In-t zahal'noyi ta neorhanichnoyi khimiyi AN URSR (Institute of General and Inorganic Chemistry, AS Ukr SSR)

PRESENTED: by Academician A.V. Dumans'kyy, AS UkrSSR

SUBMITTED: December 26, 1961

Card 2/2

DEYNEGA, Yu. F.; VINOGRADOV, G. V.; LOBASTOVA, A. V.

Temperature-frequency dependence of the dielectrical parameters on nonaqueous plastic disperse systems. Koll. zhur. 24 no.6: 659-666 N-D '62. (MIRA 16:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR, Kiyev.

(Colloids) (Dielectric constants)

DEYNEGA, Yu. F.; VINOGRADOV, G. V.

Effect of the electric field on the rheological properties of nonaqueous plastic disperse systems. Koll. zhur. 24 no.6: 667-673 N-D '62. (MIRA 16:1)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR, Kiyev.

(Lubrication and lubricants--Electric properties)
(Rheology)

PEYNEGA, Yu.F.; VINOGRADOV, G.V.

Jump in the electrostatic potential at the moment of stoppage of the flow of plastic disperse systems. Koll.zhur. 25 no.3: 379-380 My-Je '63. (MIRA 17:10)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR, Kiyev.

L 17543-63 EPF(c)/EWT(m)/BDS Pr-4 RM/WW

ACCESSION NR: AP3004428 S/0020/63/151/004/0879/0882

AUTHORS: Deynega, Yu. F.; Vinogradov, G. V. 60 58

TITLE: Behavior in an electric field and stabilities of nonaqueous plastic dispersed systems

SOURCE: AN SSSR. Doklady, v. 151, no. 4, 1963, 879-882

TOPIC TAGS: surfactant, polarized light, barium dialkyldithiosulfate, DF-1, Ca-grease, Li-grease, Na-grease, phase transition, electric field, charge exchange, dispersed phase, syneresis.

ABSTRACT: Earlier investigations by the authors revealed the possibility of studying the influence of surfactants on the structure and electrical properties of plastic systems by observing the solidified orientated flow structures in polarized light. Admixtures of 50% solution of barium dialkyldithiosulfate (DF-1) in oil (5 - 15%) were mixed with hydrated Ca-grease, Li-grease and Na-grease and changes in the macrostructure of the systems and phase transition in an electric field were observed by a method described in the previous papers. The results are presented in 15 color photographs. The action of an electric field can cause a reversible compression of the three-dimensional structural framework in plastic

Card 1/2

L 17543-63

ACCESSION NR: AP3004428

dispersed systems. Charge exchange of the dispersed phase is observed in the presence of surfactants. Differently charged particles can exist on the boundary of the phase separation. When the greases are stored, the change of the surface of particles in the dispersed phase can have a deciding effect on syneresis. Orig. art. has: 4 figures.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii Akademii nauk USSR (Institute of General and Inorganic Chemistry, Academy of Sciences, UkrSSR)

SUBMITTED: 25Dec62 DATE ACQ: 21Aug63 ENCL: 00

SUB CODE: PH, CH NO REF SOV: 005 OTHER: 000

Card 2/2

ACCESSION NR: AP4037175 S/0069/64/026/003/0296/0300

AUTHOR: Deynega, Yu. F.; Vovnenko, A. M.; Vinogradov, G. V.

TITLE: Electric conductivity of plastic dispersion systems under static and dynamic conditions

SOURCE: Kolloidny*y zhurnal, v. 26, no. 3, 1964, 296-300

TOPIC TAGS: lubricant electroconductivity, soap oil grease, plastoviscometer condenser, lubricant specific resistance, dielectric lubricant, electrokinetic phase change, electrolysis, lubricant elastic deformation

ABSTRACT: This electroconductivity was studied in soap-oil greases, with a rotatory plastoviscometer in which the interior and exterior cyclinders were isolated and which could be rapidly stopped serving as a condenser. The equipment is described in detail. Direct current resistance was measured with a megaohmmeter. Standard error was ± 1.5 — ± 10%. Structural changes of the greases in the electric fields were determined by the polarization-optical method. The greases studied were sodium, calcium and lithium-based soaps thickened with mineral oil; 20.6% Na soap of castor oil acids, 17.5% hydrated Ca soap of cottonseed oil acids and 10%

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ACCESSION NR: AP4037175

technical Li stearate. A double electric layer is known to exist in soap-oil greases on the boundary surface. Its presence is reflected in the dielectric characteristics of the lubricants. The typical soap-oil greases had a specific resistance of 10^{10} - 10^{14} ohm/cm (Li highest, Ca lowest). Upon applying a constant electric field, the specific resistance of these systems will increase with time. Change of the charge sign of the electrodes will cause a sharp drop of specific resistance. These effects were connected with various manifestations at the electrodes (e.g. electrolysis, and gas bubbles). As a result of electrolysis, water gradually disappears from the system, affording electrokinetic phase change. At the surface of the negative electrode a layer of the dispersion medium is formed. Simultaneously the structural framework is compressed at the positive electrode and the thickness of the boundary layer increases with the duration of electric field action. A drop of specific resistance occurs as a result of grease deformation. Upon abrupt stopping of the plastoviscometer-condenser, a sharp change of specific resistance is also registered. Under the influence of the force of inertia, elastic deformation of the structural framework takes place. This may pull the material off the rotor surface. Upon return of this framework, the material will again make contact with the rotor. This explains the rapidly alternating increase and decrease of specific resistance upon sharply decelerating the system.

Card 2/3

ACCESSION NR: AP4037175

Moisture plays an important part. Orig. art. has: 3 figures.

ASSOCIATION: Institut obshchey i neogranicheskoy khimii AN UkrSSR,Kiev(Institute of General and Inorganic Chemistry AN UkrSSR)

SUBMITTED: 01Oct62 ENCL: 00

SUB CODE: GC, EM NO REF SOV: 007 OTHER: 003

Card 3/3

L 59023-65 EWT(m)/EPF(c)/T Pr-4 DJ

ACCESSION NR: AP5013825 UR/0021/65/000/005/0615/0618

37
35
B

AUTHOR: Deyneha, Yu. F. (Deynega, Yu. F.)

TITLE: Compression of plastic lubricants between electrodes

SOURCE: AN UkrRSR. Dopovidi, no. 5, 1965, 615-618

TOPIC TAGS: lubricant additive, electric field, interelectrode compression, plastic lubricant, lubricant structure, surfactant, detergent lubricant, organic phosphate, calcium grease

ABSTRACT: The study of detergent lubricants in strong electric fields has shown the possibility of electrokinetic phenomena in a plastic dispersion system. The existence of a double layer at the interface may affect the structuring process significantly. It was thus of interest to investigate the changes in the electrical surface properties of the disperse phase. For this purpose, different surfactants were investigated. This investigation dealt mainly with a study of calcium grease [solidol US-2] by the polarization optical method. Under the influence of an electric field, an intense transport of the dispersion phase in the starting calcium grease takes place to the cathode, along with compression of the structural skeleton near the anode. The introduction of a 50%

Card 1/2

L 59023-65

ACCESSION NR: AP5013825

2

solution of barium dialkyldithiophosphate (DF-1) additive in excess of 10% causes charge reversal in the disperse phase. It becomes positively charged. When the concentration of DF-1 was less than 10%, an interesting phenomenon was observed. The structural skeleton was compressed in the space between the electrodes. This was due to the existence of oppositely charged areas in the structure. The compression effect was also observed in the case of grease which was partially oxidized during storage. Orig. art. has: 2 figures.

ASSOCIATION: Instytut zahal'noyi ta neorhanichnoyi khimiyi AN URSR (Institute of General and Inorganic Chemistry, AN URSR)

SUBMITTED: 23Apr64 ENCL: 00 SUB CODE: FP

NO REF SOV: 004 OTHER: 010

Card 1/2

DEYNEGA, Yu.F. [Deinega, IU.F.]; LOBASTOVA, A.V.

Effect of oxidation on electrokinetic phenomena in plastic lubricants. Dop. AN URSR no.9:1186-1189 '65. (MIRA 18:9)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

L 40802-65 EWT(m)/EPF(c)/T Pr-4 DJ

ACCESSION NR: AP5008905 S/0069/65/027/002/0289/0289

AUTHORS: Deynega, Yu. F. (Moscow); Sinitsyn, V. V. (Moscow); Vinogradov, G. V. (Moscow)

31
B

TITLE: Optical anisotropy of calcium lubricants

SOURCE: Kolloidnyy zhurnal, v. 27, no. 2, 1965, 289

TOPIC TAGS: anisotropy, calcium compound, lubricant, soap, polarization, crystal lattice, electron microscopy, optic diffraction / US 2 lubricant

ABSTRACT: Optical polarization method and electron microscopy were used in studying the structural changes in hydrated calcium lubricant US-2 under the influence of heating. The angle between the flow vector of the lubricant and the polarization plane was 45°. Upon heating the lubricant to 45-50C, its light green color was replaced by dark red, proving the absence of diffraction. The green returned at cooling the substance to room temperature. However, after heating to 70° the change became irreversible. Electron microscope study showed that up to 50C the structure of the dispersion phase did not change, whereas at 70C it changed sharply. As has been stated by R. Grin-Kelli and B. V. Deryagin (Dokl. AN SSSR, 153, 638, 1963), the reversible change in the optical properties

Card 1/2

L 40302-65
ACCESSION NR: AP5003905

0

or heating to 50C is caused by the reversible changes in the anisotropic structure of water films in the crystalline hydrates of the substance. Vast changes in the crystal lattice at 70C cause the irreversible changes of the structure and the optical properties of the lubricant. Reference is made to 2 figures not shown in the original article.

ASSOCIATION: none

SUBMITTED: 14Oct64 ENCL: 00 SUB CODE:FP,OP

NO REF SOV: 003 OTHER: 001

Card 2/2

DEYNEGA, Yu.F. [Deineha, IU.F.]; LOBASTOVA, A.V.

Effect of temperature on the dielectric properties of plastic lubricants. Dop. AN URSR no.9:1212-1215 '62. (MIRA 18:4)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

DEYNEGA, Yu.F. (Moskva); SINITSYN, V.V. (Moskva); VINOGRADOV, G.V. (Moskva)

Optical anisotropy of calcium greases. Koll. zhur. 27 no.2:289 Mr-Ap '65. (MIRA 18:6)

ACC NR: AP7007294 SOURCE CODE: UR/0020/67/172/003/0572/0575

AUTHOR: Deynega, Yu. F.; Verbitskiy, Ya. A.

ORG: Institute of General and Inorganic Chemistry, Academy of Sciences, UkrSSR (Institut obshchey i neorganicheskoy khimii Akademii nauk UkrSSR)

TITLE: Rheological properties of plastic lubricants and rotary resistance of rolling friction bearings at low speeds

SOURCE: AN SSSR. Doklady, v. 172, no. 3, 1967, 572-575

TOPIC TAGS: ball bearing, lubricant property, lubricant viscosity, elasticity, roller bearing, plastic lubricant, test method

ABSTRACT: The authors point out that most investigations of the elastic properties, strength, and viscosity of lubricants and their effects on roller bearings do not deal with the rotary resistance at low and very low speeds. They therefore investigated a radial-thrust two-row bearing (type ATsKB2339), using a test setup in which the speed could be varied between 2.5×10^{-4} and 3000 rpm. An electromagnetic clutch afforded breaking of the rotor within 0.1 sec, and special devices were used to apply loads to the inner races of the bearing and to measure the various forces. Sodium (VNIINP-223) and lithium (TsIATIM-201) lubricants were tested. The results indicate that there is a qualitative correspondence between the behavior of various lubricants in rolling friction bearings and in devices with coaxial cylinders at low speeds. At speeds down to ~5 rpm the two lubricants exhibited similar friction resistance, approximately equal to that of dioctylsebacinate oil (which was used for comparison). At low

Card 1/2

UDC: 665.4: 621.822.6

ACC NR: AP7007294

speeds, however, the two plastic lubricants had much higher friction resistance than oil. Furthermore, at a speed below some critical value the friction torque was not constant, but exhibited a jumplike self-oscillation, which varied from sample to sample. The behavior of the friction in the bearing at low speeds depended also on the prior direction of rotation, owing to different orientation-dependent effects at the point of contact between the balls and the races of the bearing. To explain the phenomenon, tests were made of the rheological properties of the lubricants at low shear rates, using a rotary plastoviscosimeter. At low speeds, spontaneous oscillations of the shear stress were observed, owing to reversible spontaneous disintegration and recovery of the structure with a periodicity that depends both on the nature of the lubricant and on the rigidity of the dynamometer. The authors thank G. V. Vinogradov for valuable advice during the discussion of the work. This report was presented by Academician P. A. Rebinder 28 March 1966. Orig. art. has: 2 figures.

[02] [WA-28]

SUB CODE: 11,13/ SUBM DATE: 17Feb66/ ORIG REF: 010/ OTH REF: 004

Card 2/2

DEYNEGO, Yu.B., kand. tekhn. nauk; PLESHKOV, D.I., kand. tekhn. nauk; SKOKAN, A.I., inzh.; STRAZH, V.I., inzh.; YARKIN, A.A., inzh.

Self-propelled construction and road machinery. Stroi. i dor. mash. 9 no.8:10-14 Ag '64 (MIRA 18:1)

DEYNEK, I.Ya., red.

[Clinical aspects and treatment of digestive system diseases; collection of articles in honor of the 80th birthday and the 55th year of medical, research, pedagogic, and public activity of Professor Pavel Alekseevich Nalivkin] Klinika i lechenie zabolevanii pishchevaritel'nogo trakta; sbornik nauchnykh rabot, posviashchennyi 80-letiiu so dnia rozhdeniia i 55-letiiu vrachebnoi, nauchno-pedagogicheskoi i obshchestvennoi deiatel'nosti professora Pavla Alekseevicha Nalivkina. Kiev, Gosmedizdat USSR, 1958. (MIRA 13:8)

1. Odessa. Meditsinskiy institut.
(DIGESTIVE ORGANS--DISEASES)

DAVYDOVA, D. I., 1912-

"The nervous system of Ascaridae (Ascaris megalocephala Cloq.)" "istological study. Tr. SIC. obshch. est., 42(2):[illegible]-359. tables 1-7

SO: Collection of Works on Nematodes of Agricultural Plants, Ed. by E. S. Mirlyanova, Gosizdat. Kolkhoz i Sovkhoz Lit., 1939, Moscow-Leningrad N/5
632.5
.06

DEYNEKA, D. I.

PA 53T79

USSR/Medicine - Histology
Medicine - Anatomy

Dec 1947

"Histological School of the Petersburg-Leningrad University," Prof D. I. Deyneka, 10½ pp

"Vest Leningrad Universitet" No 12

In Nov 1947 Chair of Anatomy and Histology of Petersburg-Petrograd-Leningrad University, commemorated 25th anniversary of death of famous Russian histologist, Prof Aleksander Stanislavovich Dogel'. Briefly gives history of chair and mentions some of members of this department.

LC

53T79

DEYNEKA. D.I., professor.

Development of neurofibrillar substance during the regeneration of peripheral nerves in man. Nauch.biul.Len.un. no.23:39-40 '49. (MLRA 10:4)

1. Fiziologicheskiy institut im. A.A.Ukhtomskogo, Laboratoriya neyrogistologii.

(NERVES) (REGENERATION(BIOLOGY))

DEYNEKA, G.K.

USSR/Human and Animal Physiology. Internal Secretion. V

Abs Jour: Ref. Zhur-Biol., No 6, 1958, 27180.

Author : P.M. Kaplan, G.K. Deyneka, E.V. Markova and N.M. Turubiner

Inst :

Title : Interoceptive Influences of the Parathryroid Glands

Orig Pub: Probl. endokrinol. i gormonoterapii, 1955, 1, No 2, 57-67.

Abstract: In 7 out of 8 dogs and 8 out of 11 rabbits after removal of the parathyroid glands of one side and in 6 out of 10 rabbits after removal of the outer parathyroid gland, there occurred a considerable increase in the chronaxie of the muscles of the same side (m. tibialis anticus). This phenomenon is viewed as the result of the drop in centripetal

Card : 1/3 Ukr. Inst. Exptl. Endocrinol.

USSR/Human and Animal Physiology. Internal Secretion. V

Abs Jour: Ref Zhur-Biol., No 6, 1958, 27180.

influence of parathyroid interoceptors. Removing the rabbit parathyroid glands from one side against a background of asymmetry in the blood Ca content of symmetrical vessels as a result of chronic stimulation of the motor and premotor zones of the cortex of the same side produces a change in the direction of the asymmetry toward the opposite side. The direction of asymmetry in Ca content is not altered when the contralateral (with respect to the focus of cortical stimulation) parathyroid glands are removed. The continuous inflow of impulses from parathyroids sewn through on one side with thread resulted in 15 out of 20 rabbits and in dogs in a shortening of chronaxie on the side stimulated. After inhibition (sleep)

Card : 2/3

68

DEYNEKA, G.K., Cand Biol Sci -- (diss) "Effect of certain ~~parts~~ pattern of the cerebral cortex on the calcium content of the blood and the role of the interceptors of the circumthyroid gland." Khar'kov, 1958, 12 pp (Min of Higher Education UkSSR. Khar'kov Order of Labor Red Banner State Univ im A.M. Gor'kiy) 110 copies (KL, 23-58, 103-4)

DEYNEKA G.K.

DEYNEKA, G.K. [Deineka, G.K.]

Effect of certain areas of the cerebral cortex on the calcium level of the blood. Fiziol.zhur.[Ukr.] 4 no.1:32-37 Ja-F '58. (MIRA 11:3)

1. Ukrains'kiy institut eksperimental'noi endokrinologii, viddil elektrofiziologii.

(CEREBRAL CORTEX) (CALCIUM IN THE BODY)

DEYNEKA, G.K.

Influence of certain divisions of the cerebral cortex on the calcium content of the blood. Sbor. nauch. trud. Ukr. nauch.-issl. inst. eksper. endok. 15:184-190 '59. (MIRA 14:11)
(CEREBRAL CORTEX) (CALCIUM IN THE BODY)
(BLOOD—ANALYSIS AND CHEMISTRY)

DEYNEKA, G.K. (Khar'kov)

Asymmetry in the calcium content of the blood as an index of interoception of the parathyroid glands. Probl. endok.i gorm. 5 no.4:8-16 Jl-Ag '59. (MIRA 13:2)

1. Iz otdela elektrofiziologii (zav. - prof. P.M. Kaplan) Ukrainskogo instituta eksperimental'noy endokrinologii (direktor - kand. med.nauk S.V. Maksimov).
(PARATHYROID GLANDS physiol.)
(CALCIUM blood)

DEYNEKA, G.K.

Role of the vagus and sympathetic nerves on the trophic effect of the cerebral cortex on the calcium content in the blood. Trudy Ukr.nauch.-issl.inst.eksper.endok. 18:91-95 '61.
(MIRA 16:1)

1. Iz otdela elektrofiziologii Ukrainskogo instituta eksperimental'noy endokrinologii.

(CALCIUM IN THE BODY) (CEREBRAL CORTEX) (VAGUS NERVE) (SYMPATHETIC NERVE)

DEYNEKA, I. Ya.

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1. Of the Department of Faculty Surgery of Vinnitsa Medical Institute (Director--I.Ya.Deyneka).

CHUKHRIYENKO, D.P.; DEYNEKA, I.Ya., professor, zaveduyushchiy kafedroy.

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1. Kafedra fakul'tetskoy khirurgii Vinnitskogo meditsinskogo instituta.
(Intestines--Obstructions) (Worms, Intestinal and parasitic)

GUK, V.V.; GRUZIN, A.I., professor, zasluzhennyy deyatel' nauki, zaveduyushchiy; DEYNEKA, I.Ya., professor, direktor

Critical notes on the project for a new classification of diseases of the joints. Sov.med. 17 no.6:21-23 Je '53. (MLRA 6:6)

1. Fakul'tetskaya terapevticheskaya klinika lechebnogo fakul'teta Odesskogo meditsinskogo instituta imeni N.I.Pirogova (for Guk and Gruzin). 2. Lechebnyy fakul'tet Odesskogo meditsinskogo instituta imeni N.I.Pirogova (for Deyneka). (Joints--Diseases)

OLEYNIK, S.F., kandidat meditsinskikh nauk; DEYNEKA, I.Ya., professor, direktor.

Blood transfusion in the treatment of endocarditis. Terap.arkh. 25 no.2: 39-45 Mr-Ap '53. (MLRA 6:5)

1. Kafedra fakul'tetskoy terapii Vinnitskogo meditsinskogo instituta.
(Blood--Transfusion) (Endocarditis)

DEYNEKA, I.Ya.

[Echinococcus of the lungs] Ekhinokokk legkikh. Kiev, Gos. med. izd-vo USSR, 1955. 278 p. (MLRA 9:7)
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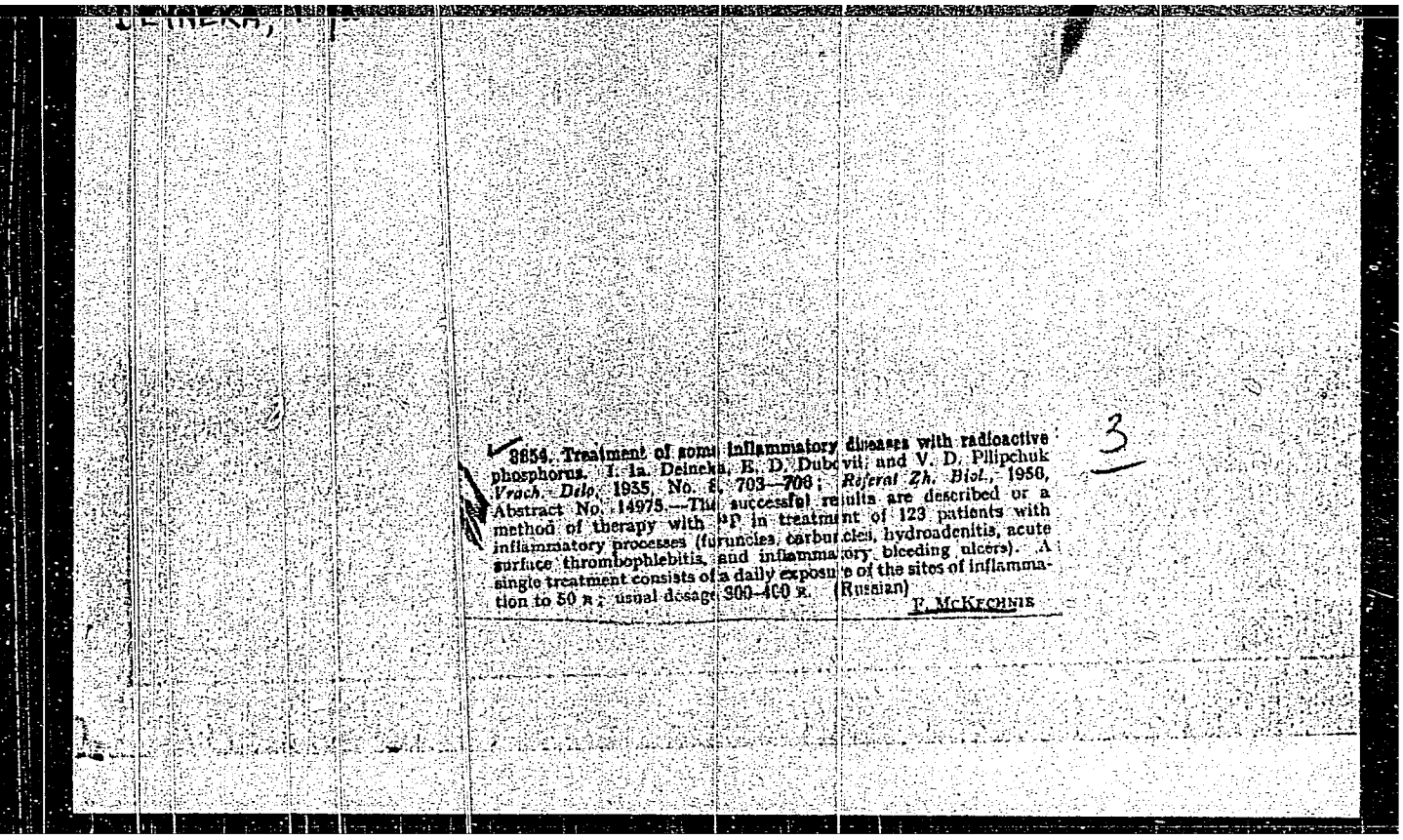

3854. Treatment of some inflammatory diseases with radioactive phosphorus. I. Ia. Deineka, E. D. Dubovit; and V. D. Pilipchuk *Vrach. Delo*, 1955, No. 6, 703—706; *Referat Zh. Biol.*, 1956, Abstract No. 14975.—The successful results are described of a method of therapy with P^{32} in treatment of 123 patients with inflammatory processes (furuncles, carbuncles, hydroadenitis, acute surface thrombophlebitis, and inflammatory bleeding ulcers). A single treatment consists of a daily exposure of the sites of inflammation to 50 r; usual dosage 300–400 r. (Russian)

F. McKechnie

DEYNEKA, I.Ya, professor; OLEYNIK, S.F., kandidat meditsinskikh nauk

Modification of cardiac sounds during goiter surgery. Vest.khir. 75 no.3:73-80 Ap '55. (MLRA 8:7)

Iz kliniki obshchey khirurgii (zav.-prof. I.Ya.Deyneka) i kliniki gospital'noy terapii (zav.-prof. M.A.Yasinovskiy) Odesskogo gosudarstvennogo meditsinskogo instituta im. N.I.Pirogova.

(GOITER, surgery,
preop. cardiac sounds)
(CARDIAC MURMURS AND SOUNDS,
in goiter surg.)

DEYNEKA, I.Ya ., professor. G. Odessa, ul. Podbel'skogo, d. 47,kv.3.

Academician Vladimir Petrovich Filatov; his life and activities.
Vest.khir. 75 no.5:150-156 Je '55. (MLRA 8:10)
(BIOGRAPHIES,
Filatov, Vladimir P.)

DEYNEKA, I. YA.

PUCHKOVSKAYA, N.A, doktor meditsinskikh nauk, redaktor; DEYNEKA, I.Ya., professor, redaktor; BARG, TS. M.,starshyy nauchnyy sotrudnik, redaktor; BARKHASH, S.A.,starshyy nauchnyy sotrudnik, redaktor; BUSHMICH, D.G.,starshyy nauchnyy sotrudnik, redaktor; VOYNO-YASENETSKIY, V.V.,kandidat meditsinskikh nauk, redaktor; DANCHEVA, L.D.,kandidat meditsinskikh nauk, redaktor; DEYNEKA, I.Ya.,professor, redaktor; KURYSHKIN, P.M.,starshyy nauchnyy sotrudnik, redaktor; MUCHNIK, S.R.,doktor meditsinskikh nauk, redaktor; PUCHKOVSKAYA, N.A., doktor meditsinskikh nauk, redaktor; RUKIN, V.A.,starshyy nauchnyy sotrudnik, redaktor; SYSOYEV,A.F.,starshyy nauchnyy sotrudnik, redaktor

[Proceedings of the jubilee conference of the Ukrainian Filatov Experimental Institute of Eye Diseases and the Odessa Pirogov Medical Institute, held on May 25-28, 1955, and dedicated to the 80th birthday of Professor Vladimir Petrovich Filatov, Hero of Socialist Labor, Stalin Prize winner, active member of the Academy of Sciences of the U.S.S.R. and the Academy of Medical Sciences of the U.S.S.R., and Honored Scientist] Trudy iubileinoi nauchnoi konferentsii Ukrainskogo eksperimental'nogo instituta glaznykh boleznei im. akad. V.P. Filatova i Odesskogo meditsinskogo instituta im. N.I. Pirogova, posviashchennoi 80-letiiu so dnia rozhdeniia Geroia Sotsialisticheskogo Truda, laureata Stalinskoi premii, deistvitel'nogo chlena Akademii nauk USSR i Akademii meditsinskikh nauk SSSR, zasluzhennogo deiatelia nauki, professora Vladimira Petrovicha Filatova, 25-28 maia 1955 g. Kiev, Gos. med. izd-vo USSR, 1956. 302 p.

(MLRA 10:4)

1. Ukraine. Ministerstvo zdravookhraneniya. (EYE--DISEASES)

DEYNEKA, I. Ya., DUBOVOY, E. D. and PILIPCHUK, B. D.

"The Application of Radioactive Phosphorus for the Treatment of Certain Inflammatory Diseases", a report presented at the Scientific Conference Devoted to the Application of Radioactive Substances in Medicine, Odessa Medical Institute, December 1954, Arkhiv, Patol., No 2, 1956

Abstract:

In this report the authors told about the results of treatment with radioactive phosphorus of suppurative diseases of the skin and of the subcutaneous cellular tissues (carbuncles, furuncles, hydradenites) and also of acute surface thrombophlebites and hemorrhoidal inflammations of the nodes.

DEYNEKA, I. Ya. and DRAGOMIRETSKIY, V. D.

"Investigation of the Functional State of the Thyroid Gland in Goiter With the aid of Radioactive Iodine", a report presented at the Scientific Conference Devoted to the Application of Radioactive Substances in Medicine, Odessa Medical Institute, December 1954, Arkhiv, Patol., No. 2, 1956

DEYNEKA, I.Ya.

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I.I.Pirogov's liberal pedagogical views. Vrach.delo no.9:995-997 S '58. (MIRA 10:9)

1. Kafedra obshchey khirurgii (zav. - zasluzhennyy deyatel' nauki, professor I.Ya.Deyneka) Sanitarno-gigiyenicheskogo i pediatricheskogo fakul'tetov Odesskogo meditsinskogo instituta
(PIROGOV, NIKOLAI IVANOVICH, 1810-1881)

DEYNEKA, I.Ya., prof., zasluzhennyy deyatel' nauki.

In memory of Aleksandr Vasil'evich Mel'nikov, obituary. Nov. khir. arkh. 5:141-142 S-O '58. (MIRA 12:1)
(MEL'NIKOV, ALEKSANDR VASIL'EVICH, 1889-1958)